GOULD FARM BRIDGE
Five Miles South of U.S. Hwy 36 at Shoal Creek
Kingston Vicinity
Caldwell County
Missouri

HAER No. MO-51

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MO.
13-KINTO.V,
1-

PHOTOGRAPHS

HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Rocky Mountain Regional Office
Department of the Interior
P.O. Box 25287
Denver, Colorado 80225

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Historic American Engineering Record
Gould Farm Bridge

I. INTRODUCTION

Location:	Located on Cart Road 302 over Shoal Creek in New York Township in Caldwell County, Missouri. In Section 14, Township 56 North, Range 27 West. It is approximately 7.4 miles east and 1-1/2 miles north of Kingston or 5.4 miles east and 5 miles south of junction of State Highway 13 and U.S. Highway 36.
Quadrangle:	Hamilton East
Longitude & Latitude:	Latitude: 39 degrees, 40 minutes, 00 seconds. Longitude: 93 degrees, 54 minutes, 07 seconds.
Date of Construction	1885 (Plaque)
Present Owner:	Caldwell County Caldwell County Courthouse Kingston, MO 64650
Present Use:	Vehicular bridge to be replaced by a new vehicular bridge. Projected date of removal: Spring 1990.
Significance:	The main span of the Gould Farm bridge is an example of common Pratt truss used extensively through the country from 1844 to the early part of this century. It was fabricated by the Cleveland Bridge Company, Cleveland, Ohio.
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II. HISTORY

A. COUNTY RECORDS

The Gould Farm Bridge was constructed in 1885. The Caldwell County Courthouse, along with all county records, was destroyed by fire in 1897. In addition, no newspapers in the county have retained early records of their publications.

A request was made of the Missouri State Historical Society in Columbia for any records in their possession for Caldwell County newspapers published between 1880 and 1890. Microfilm was obtained containing some publications from several County newspapers, however no references to the Gould Farm Bridge were disclosed. (1)

Consequently, historical information is limited to data that was recorded from the bridge plaques prior to their theft.

B. CONSTRUCTION CHRONOLOGY

The chronology of development and construction of the Gould Farm Bridge was lost in the Caldwell County Courthouse fire of 1897.

C. LOCATION

The Gould Farm Bridge is located on CART Road 302 on a sharp "S" curve in the Northwest Quarter of Section 14, Township 56 North, Range 27 West in New York Township, Caldwell County, Missouri. It is approximately 7.4 miles east and 1.6 miles north of Kingston. From the intersection of U.S. Highway 36 and Missouri

Highway 13 it is 3.9 miles east on Highway 36, 3.5 miles south on Route B, 1.2 miles east on Route U, and 1.4 miles south on CART Road 302.

III. THE BRIDGE

A. DESCRIPTION

The cost for construction of the Gould Farm Bridge is unknown due to loss of records.

The main span of the Gould Farm Bridge is a 113' - 6 panel pin connected Pratt high through truss. The approach spans are comprised of steel I beam spans of 12' and 17' on the east end and 30' on the west approach. The roadway is 13.9 feet wide with a timber deck. The substructure is comprised of concrete except for the west pier which is concrete filled steel caissons. The total length of the bridge is 173 feet with vertical clearance of approximately 15 feet over the roadway.

Main Span

The main span has diagonal members in tension with three inside vertical members acting in compression. The two vertical members nearest the ends of the main span are hangers and act in tension. The tension members, including the lower chords, consist of two steel rods or bars. The end posts and top chords are comprised of two channels with a solid cover plate and laced underside bracing. The vertical compression members are made up of two channels with riveted lacing bars on both sides. The upper

sway bracing is fabricated of angles connected with riveted lacing. The sway bracing is tied to the top pin connections at each panel point and to the end posts. The floorbeams are fabricated of angles and a tapered plate riveted together.

The bridge has little metal ornamentation. Local residents and bridge inspection records indicate that plaques did exist on the bridge. The plaques are now gone and their whereabouts is unknown.

The bridge deck is made of rough sawn lumber of various dimensions. The decking is laid transverse to the centerline of the bridge. The deck lays on stringers comprised of channels and I beams.

Approach Spans

The three approach spans are comprised of channels and I beams identical to the floor system in the main span. The deck is also identical to that used for the main span.

Piers

Both piers on the east side of the main channel are straight walls constructed of concrete. The pier on the west side of the main channel is constructed of concrete filled riveted metal caissons.

Abutments

The existing abutments are mostly buried in roadfill but evidence indicates they are both constructed of concrete.

B. MODIFICATIONS

There is some indication by local residents that one or more of the approach spans was added after the original construction in 1885.

C. OWNERSHIP & FUTURE

The Gould Farm Bridge has been owned and maintained by Caldwell County since its original construction.

The county bridge inventory number is 302001.4. Bridge inspection records indicate the structure to be in poor condition. The deck is showing signs of fairly heavy deterioration and many structural members are heavily rusted from 104 years of exposure to the elements.

The bridge is posted for an 8 ton weight limit and a speed limit of 15 mph. These restrictions, along with the narrow roadway, make the structure grossly inadequate for present needs.

The Gould Farm bridge has been scheduled for replacement. The availability of the bridge to parties or organizations interested in its historical significance has been advertised. No responses have been received.

IV. BIOGRAPHICAL MATERIAL

The Cleveland Bridge Company, Cleveland, Ohio, was incorporated in 1893 for the manufacture, construction and contracting of bridges and other structures. (2) Little information exists but the company was apparently not incorporated at the time of construction of the Gould Farm Bridge.

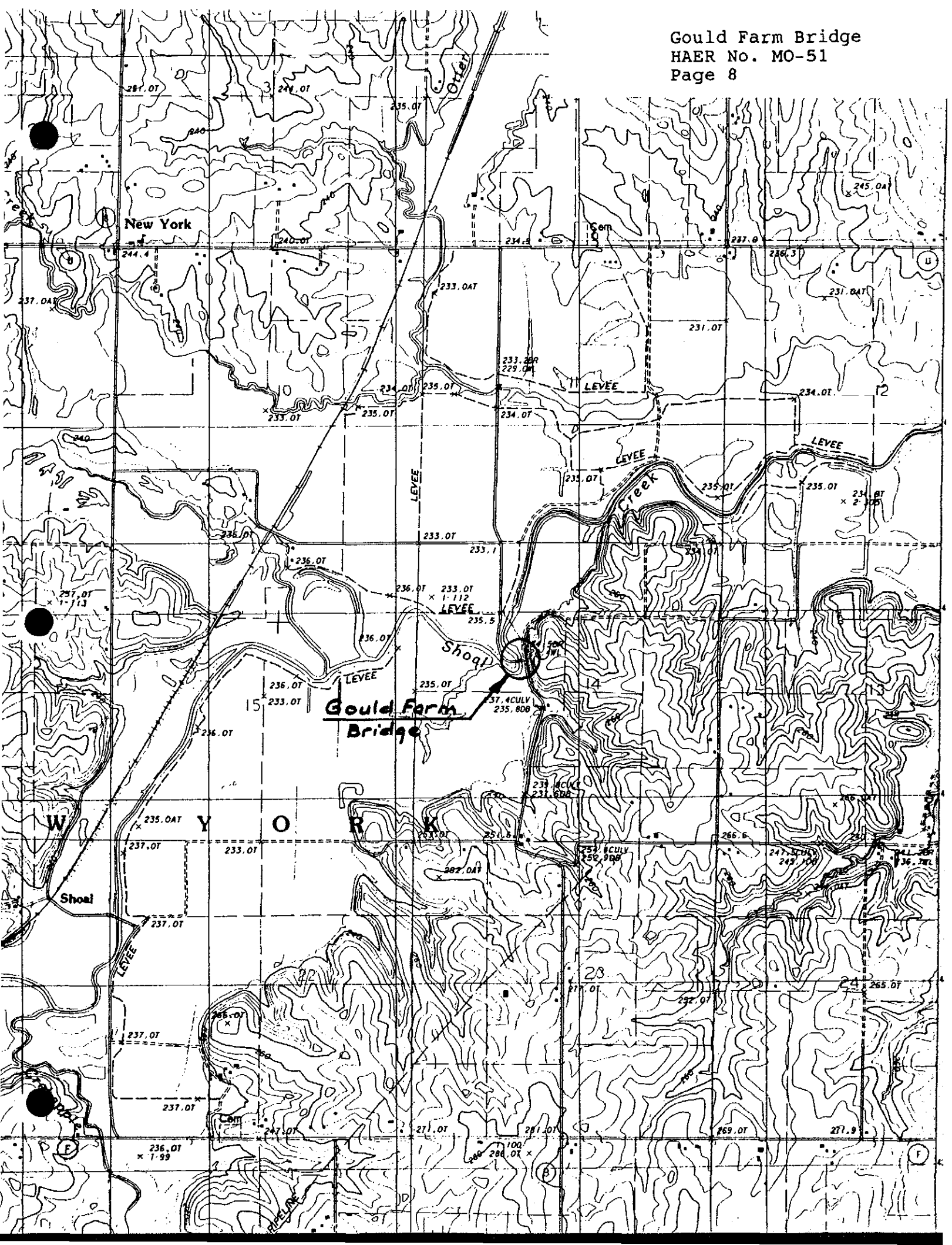
The Cleveland Bridge Company became a part of the King Bridge Company in 1923. The King Iron Bridge and Manufacturing was located in Cleveland, Ohio. King was a leading manufacturer of metal truss bridges and claimed to have the largest highway bridge works in the United States. (3) Construction of the Gould Farm Bridge fit the then common pattern of a bridge company acting as designer, fabricator and builder.

VI. FOOTNOTES

(1) Missouri State Historical Society microfilm containing copies of some publications of The Breckenridge Bulletin, Cowgill Chief, Hamilton Farmers Advocate, Hamiltonian, Hamilton News-Graphic, Caldwell County Banner, Caldwell County Sentinel, and the Kingston Times.

(2) Statement of the State Historic Preservation Officer, Missouri Dept. of Natural Resources, July 8, 1988.

(3) Simmons, David A., "The King Iron Bridge and Manufacturing Company," Society for Industrial Engineering 8 (1979), p. 6.


New York
Shoal
Gould Farm Bridge
LEVEE
Creek
W Y O R K
Shoal
LEVEE
PIPELINE